This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (currently amended): A method ~~for processing~~ comprising:

a) receiving a message for establishing a label-switched path; ~~, the method comprising:~~

~~a~~ b) determining whether or not the message includes extended information;

~~b~~ c) if the message does not include extended information, determining, using a first part of the message and routing information, whether or not to generate a further message to signal the label-switched path; and

~~c~~ d) if the message does include extended information, determining, using a second part of the message and routing information, whether or nor to generate a further message to signal the label-switched path.

Claim 2 (original): The method of claim 1, wherein the message is a label-mapping message.

Claim 3 (original): The method of claim 1, wherein the message includes a FEC-label association.

Claim 4 (original): The method of claim 1, wherein the message includes a label distribution protocol label-mapping.

Claim 5 (original): The method of claim 1, wherein the routing information was determined using an interior gateway protocol.

Claim 6 (original): The method of claim 1, wherein the extended information includes resolution next hop information.

Claim 7 (original): The method of claim 6, wherein the resolution next hop information includes a host address or prefix.

Claim 8 (original): The method of claim 7, wherein the method is performed by a first node in a network domain, and

wherein the host address or prefix is of a second node in the network domain.

Claim 9 (original): The method of claim 8, wherein the second node is an autonomous system border router.

Claim 10 (original): The method of claim 8, wherein the first node runs an interior gateway protocol for generating routing information in the first node, and

wherein the routing information includes an entry for the second node.

Claim 11 (original): The method of claim 1, wherein the first part of the message includes an address or prefix of a node.

Claim 12 (original): The method of claim 11, wherein the node is an ingress node of the label-switched path.

Claim 13 (original): The method of claim 12, wherein the method is performed by a second node in a first network domain, and

wherein the ingress node is in a second network domain.

Claim 14 (currently amended): A machine-readable storage device storing a machine-readable message comprising:

a) a first field including a label stored in association with a label-switched path;

b) a second field including forwarding equivalency class information stored in association with the label-switched path; and

c) a third field including label-switched path signaling resolution information stored in association with the label-switched path, the label-switched path signaling resolution information including one of a host address and a host prefix,

wherein ~~the label included in the first field is to be used by~~ a forwarding device, receiving the message, ~~for forwarding data only if the data forwarding device~~ processes the message to (1) determine whether or not the forwarding device has a routing table entry that matches at least one of (A) the forwarding equivalency class information included in the second field, and (B) the host address or the host prefix included in the third field, and (2) use the label included in the first field for forwarding data only if the forwarding device determined that the forwarding device has a routing table entry that matches at least one of (A) the forwarding equivalency class information included in the second field, and (B) the

host address or the host prefix included in the third field.

Claim 15 (canceled)

Claim 16 (previously presented): The machine-readable storage device of claim 14, wherein the forwarding equivalency class information includes an address or prefix of a second node in a remote network domain, and

wherein the host address or the host prefix included in the third field is of a first node which is in a local network domain, and

wherein the data forwarding device is in the local network domain.

Claim 17 (original): The machine-readable storage device of claim 16, wherein the first node is an automonous system border router.

Claim 18 (canceled)

Claim 19 (original): The machine-readable storage device of claim 14, wherein the message is a label mapping message.

Claims 20-23 (canceled)

Claim 24 (original): The machine-readable storage device of claim 14, wherein the message is a label distribution protocol label mapping message.

Claim 25 (currently amended): Elements ~~for processing~~ comprising:

a) a means for receiving a message for establishing a label-switched path; ~~comprising:~~

~~a~~ b) means for determining whether or not the message includes extended information;

~~b~~ c) means for determining, using a first part of the message and routing information, whether or not to generate a further message to signal the label-switched path if the message does not include extended information; and

~~c~~ d) means for determining, using a second part of the message and routing information, whether or nor to generate a further message to signal the label-switched path if the message does include extended information.

Claim 26 (original): The elements of claim 25, wherein the message is a label-mapping message.

Claim 27 (original): The elements of claim 25, wherein the message includes a FEC-label association.

Claim 28 (original): The elements of claim 25, wherein the message includes a label distribution protocol label-mapping.

Claim 29 (original): The elements of claim 25, wherein the routing information was determined using an interior gateway protocol.

Claim 30 (original): The elements of claim 25, wherein the extended information includes resolution next hop information.

Claim 31 (original): The elements of claim 30, wherein the resolution next hop information includes a host address or prefix.

Claim 32 (original): The elements of claim 31, wherein the elements are included in a first node in a network domain, and

wherein the host address or prefix is of a second node in the network domain.

Claim 33 (original): The elements of claim 32, wherein the second node is an autonomous system border router.

Claim 34 (original): The elements of claim 32, wherein the first node runs an interior gateway protocol for generating routing information in the first node, and

wherein the routing information includes an entry for the second node.

Claim 35 (original): The elements of claim 25, wherein the first part of the message includes an address or prefix of a node.

Claim 36 (original): The elements of claim 35, wherein the node is an ingress node of the label-switched path.

Claim 37 (original): The elements of claim 36, wherein the elements are included in a second node in a first network domain, and

wherein the ingress node is in a second network domain.

Claim 38 (previously presented): The method of claim 1, wherein the second part of the message includes at least one of a host address and a host prefix corresponding to a node within a local network domain.

Claim 39 (previously presented): The elements of claim 25, wherein the second part of the message includes at least one of a host address and a host prefix corresponding to a node within a local network domain.

Claim 40 (previously presented): The method of claim 1, further comprising:

d) generating, if it is determined to generate a further message to signal the label-switched path, a label mapping message.

Claim 41 (previously presented): The method of claim 1, further comprising:

d) generating, if it is determined to generate a further message to signal the label-switched path, a label mapping message including an outgoing label; and

e) creating a forwarding state binding between the outgoing label and a label in the message.

Claim 42 (previously presented): The elements of claim 25, further comprising:

d) means for generating, if it is determined to generate a further message to signal the label-switched path, a label mapping message.

Claim 43 (previously presented): The elements of claim 25, further comprising:

d) means for generating, if it is determined to generate a further message to signal the label-switched path, a label mapping message including an outgoing label; and

e) means for creating a forwarding state binding between the outgoing label and a label in the message.

Claim 44 (new): A method for use by a data forwarding device comprising:

a) receiving a first message for establishing a first label-switched path;

b) determining that the first message does not include extended information;

c) finding a first label-switched route matching a first part of the first message;

d) determining that an interface of the first matching label-switched route found matches an interface on which the first message was received;

e) generating a first further message to signal the first label-switched path;

f) receiving a second message for establishing a second label-switched path;

g) determining that the second message includes extended information;

h) finding a second label-switched route using a second part of the second message;

i) determining that an interface of the second matching label-switched route found matches an interface on which the second message was received; and

j) generating a second further message to signal the second label-switched path.

Claim 45 (new): The method of claim 1 wherein the first part of the message includes a FEC-label association.

Claim 46 (new): The method of claim 1 wherein the first part of the message includes a label distribution protocol label-mapping.

Claim 47 (new): The method of claim 1 wherein the second part of the message includes resolution next hop information.

Claim 48 (new): The method of claim 1 wherein the further message generated is a label mapping message.